

DRAFT & Proposed
COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Tidewater Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Commonwealth Chesapeake Company, LLC
3415 White Oak Way, New Church, Virginia
Permit No. TRO-40898

Title IV and V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Article 3 Federal Operating Permits (FOP). As required by 40 CFR Part 70, 40 CFR Parts 72 through 76, 9 VAC 5-140-10 through 9 VAC 5-140-900, and 9 VAC 5 Chapter 80, Commonwealth Chesapeake Company, LLC has applied for an Article 3 FOP for its New Church facility. The Department has reviewed the application and has prepared this analysis document to support the Article 3 FOP.

Engineer/Permit Contact: _____ Date: _____
Barry W. Halcrow
(757) 518-2184

Air Permit Manager: _____ Date: _____
Jane A. Workman

Regional Deputy Director: _____ Date: _____
Harold J. Winer

Attachment A: NSR of October 5, 2000

FACILITY INFORMATION

Permittee

Commonwealth Chesapeake Company, LLC
3415 White Oak Way
New Church, VA 23415-2948

Responsible Official

Thomas A. Larson
General Manager, Commonwealth Chesapeake Company, LLC
US EPA AAR ID No.: 2110

Facility Operator

TECO Power Services Virginia Operations Company

Facility

Commonwealth Chesapeake Power station
3415 White Oak Way
New Church, VA 23415-2948

Contact Person

Thomas A. Larson
General Manager, Commonwealth Chesapeake Company, LLC
Phone Number: (757) 824-3340

AIRS ID No. 51-001-00030

ORIS Code ID: 055381

NATS Facility Identification Number: 055381

SOURCE DESCRIPTION

SIC Code: 4911. Commonwealth Chesapeake Power Station functions as a peaker plant with seven GE LM6000 simple cycle combustion turbines fired on only oil to generate electricity.

The facility is a major source of NO_x, CO, and SO₂. This source is located in an attainment area for all pollutants, and is a PSD source. The facility was previously permitted under a PSD permit issued on October 5, 2000.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, part of a compliance report for 2003 was not submitted. Thus, DEQ initiated enforcement action. The facility has completed all of the necessary actions to return to compliance at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	
Combustion Turbines							
CT-1 thru 7	CT 1-7	GE LM6000. CT 1 thru 3, 2000. CT 4 thru 7, 2001.	Each 43.3 megawatts at ISO conditions	GE water injection on each CT, 2000 and 2001.	WI 1-7	NOx	
Distillate Oil Storage Tanks							
T-1, 2, & 3	T 1-3	Above ground fixed roof tanks, 2000 & 2001	Each at 2.2 million gal	N/a	N/a	N/a	
T-4 & 5	T 4 & 5	Above ground fixed roof tanks, 2001	Each at 200 K gal	N/a	N/a	N/a	

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

EMISSIONS INVENTORY

Actual Emissions					
	2003 Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	CO	SO ₂	PM ₁₀	NO _x
CT 1-7	0.8	11.2	47.0	11.4	146.0

I. EMISSION UNIT APPLICABLE REQUIREMENTS: NSR permit 10/05/2000

Limitations (per permit condition number)

3. The permittee shall meet all the applicable requirements of 40 CFR 60, Subpart GG Standards of Performance for Stationary Gas Turbines; and, 40 CFR Part 60, Subpart Kb [60.116b, paragraphs (a) and (b)] - Standards of Performance for Volatile Organic Liquid Storage Vessels.
(9 VAC 5-50-410)
4. Particulate matter emissions from each combustion turbine shall be controlled by the use of distillate oil, a clean burning fuel. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-1800)
5. Sulfur dioxide and sulfuric acid mist emissions from each combustion turbine shall be controlled by the use of distillate oil with sulfur not to exceed 0.05% by weight.
(9 VAC 5-80-1800)
6. Nitrogen oxide emissions from each combustion turbine shall be controlled by water injection except during startup and shutdown when the use of water injection would interfere with turbine operations. The rate of water injection shall be at least that established during emissions tests as being sufficient to meet the emissions standards set forth in this permit.
(9 VAC 5-80-1800)
7. Carbon monoxide and volatile organic compound emissions from each combustion turbine shall be controlled by the use of good combustion operating practices.
(9 VAC 5-80-1800)
9. Combustion turbines CT-1, 2, 3, 4, 5, 6, and 7 (combined) shall not use more than 42.0 million gallons of distillate oil each year, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-1100 formerly 9 VAC 5-80-10, 9 VAC 5-50-50)

10. Combustion turbines 1-3 (combined) shall not operate more than 6,000 hours per year, and combustion turbines 4-7 (combined) shall not operate more than 8,000 hours per year, which means that the seven turbines can be operated simultaneously for up to 2000 hours per year. The number of operating hours for each combustion turbine shall be calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-1180 formerly 9 VAC 5-80-10 H)
11. Except during startup and shutdown, each combustion turbine shall not operate at less than 70% of capacity.
(9 VAC 5-170-160)
12. The permittee is authorized to store distillate oil in storage tanks with Unit Reference Nos. T-1 through T-5. A change in the materials stored may require a permit to modify and operate.
(9 VAC 5-80-1100 formerly 9 VAC 5-80-10)
13. The sulfur content and fuel-bound nitrogen content of the distillate oil to be burned in the combustion turbines shall not each exceed 0.05 percent by weight per shipment.
(9 VAC 5-80-1800 and 9 VAC 5-50-20)

20. Emissions from the operation of the combustion turbines CT 1, 2, and 3 shall not exceed the limits as specified below:

	(each at 100% of capacity)	(combined total)
	lb/hr	tons/yr
Particulate Matter	10.3	30.9
PM-10	10.3	30.9
Sulfur Dioxide	23.9	65.1
Nitrogen Oxides (as NO ₂)	(42 ppmvd* for FBN ≤ 0.015%) 85.1	243.6**
Nitrogen Oxides (as NO ₂)	(42 + 400 FBN) ppmvd* for 0.015% < FBN ≤ 0.05% 125.6	243.6**
Carbon Monoxide	30.0	90.0
Volatile Organic Compounds	5.6	16.8
Sulfuric Acid Mist	2.7	7.4

(Yearly is calculated as the sum of each consecutive 12 month period.)

(one hour average at 15% oxygen, adjusted to ISO standard ambient conditions)

** (includes all operating hours per year--normal operations with the water injection system and startup, shutdown, or any malfunctions when the water injection system is not used)

FBN - Fuel Bound Nitrogen, percent by weight.

(9 VAC 5-50-260)

29. In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment or air pollution control equipment, the permittee shall:
- Develop a maintenance schedule of all scheduled and non-scheduled maintenance and,
 - Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.
- (9 VAC 5-50-20 E, 9 VAC 5-170-160)
30. The permittee shall have available written operating procedures for the related air pollution control equipment. Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures. These procedures shall be based on the manufacturer's recommendations, at minimum. The permittee shall maintain records of training provided including names of trainees, date of training and nature of training.
- (9 VAC 5-170-160)

Monitoring

13. The monitoring requirements of this NSR permit condition have been modified to clarify when and how the %S and nitrogen fuel oil content monitoring will be conducted.
- Scenario #1 for sulfur and nitrogen content of fuel oil: The permittee shall obtain a fuel certification from the fuel supplier with each shipment of distillate oil delivered to each turbine fuel storage tank. Each fuel supplier certification shall include the following:
- The name of the fuel supplier;
 - The date on which the distillate oil was received;
 - The volume of distillate oil delivered in the shipment;
 - A statement that the distillate oil complies with the American Society for Testing and Materials specifications for numbers 1 or 2 fuel oil;
 - The sulfur content of the distillate oil and indicate which ASTM method was used to determine the sulfur content: ASTM D 2880-71, 78, or 96, ASTM D-1552, ASTM D-129, or other approved method,
 - The nitrogen content of the distillate oil and indicate which ASTM method was used to determine the nitrogen content: ASTM D-3228, ASTM D-5291, or other approved method.
- Scenario #2 for sulfur and nitrogen content of fuel oil: If the permittee does not obtain a fuel certification from the fuel supplier with each shipment of distillate oil delivered to the turbine fuel storage tank(s) under Scenario #1, the permittee shall sample and analyze the fuel from the tank(s) after each filling process has been completed to determine:
- The distillate oil complies with the American Society for Testing and Materials specifications for numbers 1 or 2 fuel oil;
 - The sulfur content of the distillate oil by using ASTM D 2880-71, 78, or 96, ASTM D-1552, ASTM D-129, or other approved method,
 - The nitrogen content of the distillate oil by using ASTM D-3228, ASTM D-5291, or other approved method.
- (9 VAC 5-80-1800 and 9 VAC 5-50-20)

17. The continuous monitoring systems shall be installed and operated to monitor and record the fuel consumption and ratio of water injected to fuel being fired in each combustion turbine. These monitoring systems shall be operated at all times that water is being injected into the combustion turbines and shall be accurate to within ± 5.0 percent. The systems shall be maintained and calibrated in accordance with manufacturer's specifications. As a minimum, calibration shall be done prior to the performance test and at least annually thereafter.
(9 VAC 5-50-20, 9 VAC 5-50-40)

Additional Title V monitoring requirement:

The permittee shall perform monthly visual observations on each turbine stack exhaust during daylight hours of normal operations for visible emissions. If visible emissions are noted from the stack, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average exceeds five (5) percent, the VEE shall continue for one hour from initiation on the turbine stack to determine compliance with the opacity limit. The permittee shall record the details of the visual observations, VEE, and any maintenance actions to reduce opacity.

Recordkeeping

- 13 & 25 The permittee shall maintain records of all emission data and operating parameters for the seven combustion turbines necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. The total operating hours per year for each combustion turbine with combined operating hours for CT 1-3 and CT 4-7, calculated as the sum of each consecutive 12 month period;
 - b. All the fuel oil analysis reports for sulfur and nitrogen content in accordance with condition 13;
 - c. Oil shipments purchased, indicating the name of the supplier, date of purchase, type and volume of fuel per each shipment;
 - d. Annual amount of distillate oil consumed by all turbines, calculated as the sum of each consecutive 12 month period;
 - e. Monthly and annual NO_x and SO₂ emission calculations. Monthly and annual emissions calculations for all other pollutants listed in Conditions 20, 21, and 22 based on the usage of DEQ approved emission factors;
 - f. Listing of DEQ approved emission factors for pollutants listed in Condition 20, 21, and 22;
 - g. Records of products stored in tanks T 1-5, dimensions and storage capacity of each tank;
 - h. Semi-annual excess emissions reports.
- These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-50)

Additional T-5 recordkeeping:

Turbine stack visual observations and VEEs.

29. In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment or air pollution control equipment, the permittee shall:
- Maintain records of all scheduled and non-scheduled maintenance. These records shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request,
(9 VAC 5-50-20 E, 9 VAC 5-170-160)
30. The permittee shall have available written operating procedures for the related air pollution control equipment. The permittee shall maintain records of training provided including names of trainees, date of training and nature of training.
(9 VAC 5-170-160)

Testing

15. After the initial performance tests, performance tests shall be conducted on one combustion turbine each calendar year. A different turbine shall be selected each year such that each turbine selected shall be tested about every seven years for nitrogen oxides while operating at 70% and 100% of capacity by using Method 20 (40 CFR Part 60, Appendix A) to determine compliance with NO_x limits specified in condition 20 or 21. The tests shall be performed anytime during each calendar year following the initial performance test year. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Tidewater Regional Office.
(9 VAC 5-50-30 G)
16. Concurrently with the annual performance tests for the selected turbine being tested, a Visible Emission Evaluation (VEE) in accordance with 40 CFR, Part 60, Appendix A, Method 9, shall also be conducted on the combustion turbine stack while operating at 70% and 100% of capacity. The test shall consist of 10 sets of 24 consecutive observations (at 15 second intervals) to yield 6 minute averages.
(9 VAC 5-50-20, 9 VAC 5-50-30)

The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

If additional testing to demonstrate compliance is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods or other approved methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method
VOC	EPA Methods 18, 25, or 25A and 19
NO _x	EPA Method 20
SO ₂	EPA Methods 6, or 6C and 19
CO	EPA Method 10 and 19
PM/PM-10	EPA Methods 5/201
Visible Emission	EPA Method 9

Reporting

15. For the annual test on one of the combustion turbines, the permittee shall submit a test protocol, required by Condition III.D.1, at least 30 days prior to testing. One copy of the test results shall be submitted to the Director, Tidewater Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30 G)
16. For the annual VEE on one of the combustion turbines, required by Condition III.D.2, one copy of the test results shall be submitted to the Director, Tidewater Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-20, 9 VAC 5-50-30)
16. For annual VEE on one of the combustion turbines, should conditions prevent concurrent opacity observations, the Director, Tidewater Regional Office shall be notified in writing, within 7 days, and visible emissions testing to be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests and annual tests.
(9 VAC 5-50-20, 9 VAC 5-50-30)
19. Semi-annual reports of excess emissions shall be submitted to the Director, Tidewater Regional Office in accordance with 40 CFR Part 60, Section 7(c). The time periods to be addressed are January 1 to June 30 and July 1 to December 31. The reports shall be postmarked by January 31 and July 31 of each calendar year. The reporting cycle shall begin with the first report being submitted at the end of the time period in which the initial performance tests as specified in condition 14 have been conducted. In addition to the information required by 40 CFR Part 60, Section 7(c), each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions. For the purpose of this report, periods of excess emissions are defined as follows:
 - a. Any one hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the average water- to-fuel ratio determined to demonstrate compliance with the nitrogen oxide PPMvd limits specified in condition 20 or 21 during the most recent compliance test.
 - b. Any period during which the sulfur content of the distillate oil being fired in the combustion turbines exceeds 0.05 percent by weight.
 - c. Any period during which the nitrogen content of the distillate oil being fired in the gas turbines exceeds 0.05 percent by weight.
(9 VAC 5-170-160 and 9 VAC 5-50-20)

II. EMISSION UNIT APPLICABLE REQUIREMENTS: Title IV Acid Rain Program Requirements

a. Statutory and Regulatory Authorities

In accordance with the Air Pollution Control Law of Virginia §10.1-1308 and §10.1-1322, the Environmental Protection Agency (EPA) Final Full Approval of the Operating Permits Program (Titles IV and V) published in the Federal Register December 4, 2001, Volume 66, Number 233, Rules and Regulations, Pages 62961-62967 and effective November 30, 2001, and Title 40, the Code of Federal Regulations §§72.1 through 76.16, the Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to 9 VAC 5 Chapter 80, Article 3 of the Virginia Regulations for the Control and Abatement of Air Pollution (Federal Operating Permit Article 3).
9 VAC 5-80-490 B.2)

b. SO₂ Allowance Allocations and NO_x Requirements for affected units

		2005	2006	20007	2008	2009
CT 1-7 Each a 43.3 Mwe/hr (at ISO conditions) oil fired simple cycle gas turbine.	SO ₂ allowances, allocated by U. S. EPA (tons). NO _x limit:	None. ¹ N/A, not subject to 40 CFR 76.	None. ¹ N/A, not subject to 40 CFR 76.	None. ¹ N/A, not subject to 40 CFR 76.	None. ¹ N/A, not subject to 40 CFR 76.	None. ¹ N/A, not subject to 40 CFR 76.

(9 VAC 5-80-490 A.4)

Note 1:

- a. Each unit was not eligible for SO₂ allowance allocation by U.S. EPA under Section 405 of the Clean Air Act and the Acid Rain Program, so none were assigned in 40 CFR Part 73, Table 2.
(9 VAC 5-80-420 C.6)
- b. SO₂ allowances may be acquired from other sources in addition to those allocated by U.S. EPA. No revision to this permit is necessary in order for the owners and operators of each unit to hold additional allowances recorded in accordance with 40 CFR Part 73. The owners and operators of each unit remain obligated to hold sufficient allowances to account for SO₂ emissions from the unit in accordance with 40 CFR 72.9(c)(1).
(9 VAC 5-80-420 C.1 and H.1 and 9 VAC 5-80-490 O)

c. **Additional Requirements**

The permittee shall submit a complete permit application that includes all of the information required under 40 CFR §§72.21 and 72.31 at least 6 months, but no earlier than 18 months, prior to the date of expiration of the existing Phase II Acid Rain permit. EPA forms shall be used.
(9 VAC 5-80-430 C.5)

III. EMISSION UNIT APPLICABLE REQUIREMENTS: NO_x Allowance Budget Trading Program Requirements

a. **General Conditions**

- (1) A review of the air emission units included in this permit approval has determined that the equipment listed in Table VIII.A-1 meets the definition of a NO_x Budget Unit and falls subject to the NO_x Budget emission limitations under 9 VAC 5-140-40. As required by 9 VAC 5-140-200 A, for each NO_x Budget source required to have a federally enforceable permit, such permit will include the NO_x Allowance Budget Trading permit to be administered by the permitting authority. This section represents the NO_x Budget Trading permit.

Table VIII.A – 1 Facility NO _x Budget Units				
Facility Unit ID	Unit NATS Code	Unit Name and description	Maximum Heat Capacity (MMBtu/hr) at ISO conditions	Maximum Generation Capacity (megawatts) at ISO conditions
CTZ-001	055381	GE LM 6000 Gas Turbine	380	43.3
CTZ-002	055381	GE LM 6000 Gas Turbine	380	43.3
CTZ-003	055381	GE LM 6000 Gas Turbine	380	43.3
CTZ-004	055381	GE LM 6000 Gas Turbine	380	43.3
CTZ-005	055381	GE LM 6000 Gas Turbine	380	43.3
CTZ-006	055381	GE LM 6000 Gas Turbine	380	43.3
CTZ-007	055381	GE LM 6000 Gas Turbine	380	43.3

(9 VAC 5-140-40)

- (2) The NO_x Budget Trading permit will be administrated by the VADEQ under the authority of 9 VAC 5-80-360 et seq., Article 3 and 9 VAC 5-140-10 et seq.
(9 VAC 5-140-200 A)
- (3) This NO_x Budget Trading permit will become effective on May 31, 2004.
(9 VAC 5-140-240.1)

b. Standard Requirements (NO_x budget permitted units)

(1) Monitoring requirements.

- (a) The owners and operators and, to the extent applicable, the NO_x authorized account representative of each NO_x Budget source and each NO_x Budget unit at the source shall comply with the monitoring requirements of Article 8, 9 VAC 5-140-700 et seq. (9 VAC 5-140-60 B.1)
- (b) The emissions measurements, recorded and reported in accordance with 9 VAC 5-140-700 et seq. and subpart H of 40 CFR part 97, shall be used to determine compliance by the unit with the NO_x Budget emissions limitation under paragraphs B.2.a. through B.2.h. The following approved methods will be used to calculate NO_x Control Period and Annual emission rates:

**Table VIII.B - 1
NO_x Mass Emission Rate Monitoring**

UNIT CT 1-7	ITEM MONITORED	MONITORING METHODS (40 CFR 75)
OIL FIRED	NO _x rate (lb/mm btu) HEAT rate (mm btu/hr)	Appendix E Appendix D
LME ONLY OPTION	NO _x rate (lb/mm btu) HEAT rate (mm btu/hr)	Appendix E, or default or unit specific from 40 CFR 75.19 Appendix D, or default or unit specific from 40 CFR 75.19

(9 VAC 5-140-60 B.1 and 9 VAC 5-140-60 B.2)

(2) Nitrogen oxides requirements.

- (a) The owners and operators of each NO_x Budget source and each NO_x Budget unit at the source shall hold NO_x allowances available for compliance deductions under 9 VAC 5-140-540 A, B, or F, as of the NO_x allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_x emissions for the control period from the unit, as determined in accordance with Article 8, 9 VAC 5-140-700 et seq., plus any amount necessary to account for actual utilization under 9 VAC 5-140-420 E for the control period or to account for excess emissions for a prior control period under 9 VAC 5-140-540 D or to account for withdrawal from the NO_x Budget Trading Program. (9 VAC 5-140-60 C.1)

- (b) Each ton of nitrogen oxides emitted in excess of the NO_x Budget emissions limitation shall constitute a separate violation of this part, the Clean Air Act, and applicable Virginia Air Pollution Control law.
(9 VAC 5-140-60 C.2)
 - (c) A NO_x Budget unit shall be subject to the requirements under 9 VAC 5-140-60 C.1 starting on May 31, 2004.
(9 VAC 5-140-60 C.3)
 - (d) NO_x allowances shall be held in, deducted from, or transferred among NO_x Allowance Tracking System accounts in accordance with Article 5 (9 VAC 5-140-400 et seq.), Article 6 (9 VAC 5-140-500 et seq.), Article 7 (9 VAC 5-140-600 et seq.), and Article 9 (9 VAC 5-140-800 et seq.).
(9 VAC 5-140-60 C.4)
 - (e) A NO_x allowance shall not be deducted, in order to comply with the requirements under 9 VAC 5-140-60.C.1, for a control period in a year prior to the year for which the NO_x allowance was allocated.
(9 VAC 5-140-60 C.5)
 - (f) A NO_x allowance allocated by the permitting authority or the administrator under the NO_x Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO_x Budget Trading Program. No provision of the NO_x Budget Trading Program, the NO_x Budget permit application, the NO_x Budget permit, or an exemption under 9 VAC 5-140-50 and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization.
(9 VAC 5-140-60 C.6)
 - (g) A NO_x allowance allocated by the permitting authority or the administrator under the NO_x Budget Trading Program does not constitute a property right.
(9 VAC 5-140-60 C.7)
 - (h) Upon recordation by the administrator under Article 6 (9 VAC 5-140-500 et seq.), Article 7 (9 VAC 5-140-600 et seq.), or Article 9 (9 VAC 5-140-800 et seq.), every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x Budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NO_x Budget permit of the NO_x Budget unit by operation of law without any further review.
(9 VAC 5-140-60 C.8)
- (3) Excess emissions requirements.
- The owners and operators of a NO_x Budget unit that has excess emissions in any control period shall:

- (a) Surrender the NO_x allowances required for deduction under 9 VAC 5-140-540 D 1; and
- (b) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 9 VAC 5-140-540 D 3.

c. **Recordkeeping and Reporting Requirements**

The following requirements concerning recordkeeping and reporting shall apply:

- (1) Unless otherwise provided, the owners and operators of the NO_x Budget source and each NO_x Budget unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the permitting authority or the administrator.
(9 VAC 5-140-60 E.1)
 - (a) The account certificate of representation for the NO_x authorized account representative for the source and each NO_x Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9 VAC 5-140-130; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_x authorized account representative.
(9 VAC 5-140-60 E.2)
 - (b) All emissions monitoring information, in accordance with Article 8, 9 VAC 5-140-700 et seq. for three years or period provided in Article 8, 9 VAC 5-140-740.
(9 VAC 5-140-740)
 - (c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Budget Trading Program.
(9 VAC 5-140-60 E.1)
 - (d) Copies of all documents used to complete a NO_x Budget permit application and any other submission under the NO_x Budget Trading Program or to demonstrate compliance with the requirements of the NO_x Budget Trading Program.
(9 VAC 5-140-60 E.1)
- (2) The NO_x authorized account representative of a NO_x Budget source and each NO_x Budget unit at the source shall submit the reports and compliance certifications required under the NO_x Budget Trading Program, including those under Article 4 (9 VAC 5-140-300 et seq.) or Article 8 (9 VAC 5-140-700 et seq.).
(9 VAC 5-140-60 E.1)

d. **Certification**

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant or Stack Parameter	Certification Test Method 40 CFR 75
NO _x Concentration	USEPA Method 20 or 7 E
Opacity	USEPA Method 9
Fuel use / heat flow	40 CFR 75, Appendix D

(9 VAC 5-140-300 to 310)

e. **Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the NO_x Budget Trading Program, a NO_x Budget permit, or an exemption under 9 VAC 5-140-50 shall be subject to enforcement pursuant to applicable State or Federal law.

(9 VAC 5-140-60 F.1)

- (2) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.

(9 VAC 5-140-60 F.2)

- (3) No permit revision shall excuse any violation of the requirements of the NO_x Budget Trading Program that occurs prior to the date that the revision takes effect.

(9 VAC 5-140-60 F.3)

- (4) Each NO_x Budget source and each NO_x Budget unit shall meet the requirements of the NO_x Budget Trading Program.

(9 VAC 5-140-60 F.4)

- (5) Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget source or the NO_x authorized account representative of a NO_x Budget source shall also apply to the owners and operators of such source and of the NO_x Budget units at the source.
(9 VAC 5-140-60 F.5)
- (6) Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget unit or the NO_x authorized account representative of a NO_x budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under Article 8 (9 VAC 5-140-700 et seq.), the owners and operators and the NO_x authorized account representative of one NO_x Budget unit shall not be liable for any violation by any other NO_x Budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.
(9 VAC 5-140-60 F.6)

f. Effect on Other Authorities

No provision of the NO_x Budget Trading Program, a NO_x Budget permit application, a NO_x Budget permit, or an exemption under 9 VAC 5-140-50 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_x authorized account representative of a NO_x Budget source or NO_x Budget unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, the Clean Air Act.
(9 VAC 5-140-60.G)

IX. STATE-ONLY ENFORCEABLE REQUIREMENTS

From the 10/05/2000 NSR permit, this section is included pursuant to 9 VAC 5-50-160, *et seq.*, and is not required under the federal Clean Air Act or under any of its applicable federal requirements.

35. The emissions from the operation of the combustion turbines CT 1 thru 7 shall not exceed the limits as specified below:

	(each at 100% of capacity) lb/hr	(combined total) tons/yr
Hazardous Air Pollutants (as VOC)		
Formaldehyde	0.1	0.8
Hazardous Air Pollutants (as PM-10)		
Lead	0.006	0.04
Arsenic	0.005	0.03
Beryllium	0.0001	0.0009
Cadmium	0.002	0.01
Chromium	0.005	0.03
Manganese	0.4	2.3
Mercury	0.0005	0.004
Selenium	0.01	0.07

These emissions are derived from the estimated overall emission contribution from operating limits and emission factors supplied by the permittee. Exceedances of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 2 and 9.

(Yearly is calculated as the sum of each consecutive 12 month period.)

(9 VAC 5-50-180)

36. The permittee shall maintain records of all emission data and operating parameters for the seven combustion turbines necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- a. Monthly and annual emissions for all other pollutants listed in Condition 35 from the usage of DEQ approved emission factors,
- b. Listing of DEQ approved emission factors for pollutants listed in Condition 35.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent 5 years.

(9 VAC 5-50-50)

Streamlined Requirements

The following conditions in the NSR permit of 10/05/2000 were not included in the Acid Rain Operating permit for the following reasons:

Condition 8: All of the test ports were installed during construction as was shown when initial testing on each turbine was conducted and completed.

Condition 14: All initial testing for NOx emissions from each turbine at start-up to show compliance with the permit had been accomplished in 2000 for CT 1-3 and 2001 for CT 4-7.

Condition 16: All initial testing for opacity from each turbine at start-up to show compliance with the permit had been accomplished in 2000 for CT 1-3 and 2001 for CT 4-7.

Condition 18: CMS for each turbine was installed prior to initial testing for each turbine to show compliance with the permit had been accomplished in 2000 for CT 1-3 and 2001 for CT 4-7.

Condition 24: Notifications for installation, start-up, and proposed initial testing date for each turbine had been accomplished in 2000 for CT 1-3 and 2001 for CT 4-7.

Condition 31: Invalidation because of non-construct is not needed as all units were constructed within permit time lines.

Condition 1: Incorporated into Title V Acid Rain boilerplate language of Condition VI.J.

Condition 2: Incorporated into Title V Acid Rain boilerplate language of Condition II.

Condition 26: Incorporated into Title V Acid Rain boilerplate language of Condition VI.V.

Condition 27: Incorporated into Title V Acid Rain boilerplate language of Condition VI.Q.

Condition 28: Incorporated into Title V Acid Rain boilerplate language of Condition VI.F.

Condition 32: Incorporated into Title V Acid Rain boilerplate language of Condition VI.T.

Condition 33: Incorporated into Title V Acid Rain boilerplate language of Condition VI.L.

Condition 34. Incorporated into Title V Acid Rain boilerplate language of Condition VI.S.

NSPS: 40 CFR 60, Subpart Kb, Para 60.116.b) for recordkeeping of tank dimensions, capacity, and products stored were included in Condition III.C.7.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by '' 2.1-20.01:2 and '' 10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

This general conditions cites the entire Article that follow:

B.2. Article 3 (9 VAC 5-80-510 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

B.3. Article 3 (9 VAC 5-80-430 C & D et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

This general condition cites the sections that follow:

- B. 9 VAC 5-80-430. "Application"
- B.2. 9 VAC 5-80-510. "Action on Permit Applications"
- B.3. 9 VAC 5-80-430. "Application"
- B.4. 9 VAC 5-80-430. "Application"
- B.4. 9 VAC 5-80-500. "Permit Shield"
- B.5. 9 VAC 5-80-430. "Application"

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excesses emissions reporting within 4 hours. Section 9 VAC 5-80-650 also requires malfunction reporting; however, reporting is required within 2 days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to this section including Title 5 Acid Rain facilities. Section 9 VAC 5-80-650 is from the Acid Rain regulations. Title 5 Acid Rain facilities are subject to both Sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-650. The report must be made within 4 day time business hours of the malfunction.

In order for emission units to be relieved from the requirement to make a written report in 14 days the emission units must have continuous monitors and the continuous monitors must meet the requirements of 9 VAC 5-50-410 or 9 VAC 5-40-41.

This general condition cites the sections that follow:

- F. 9 VAC 5-50-50. Notification, Records and Reporting
- F.1. 9 VAC 5-50-50. Notification, Records and Reporting
- F.2. 9 VAC 5-50-50. Notification, Records and Reporting

This general condition contains a citation from the Code of Federal Regulations as follows:

F.3.a. 40 CFR 60.13 (h). Monitoring Requirements.

U. Failure/Malfunction Reporting

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in section 9 VAC 5-80-650 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

- U.2.d. 9 VAC 5-80-490. Permit Content
- U.2.d. 9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

INAPPLICABLE REQUIREMENTS

Citation	Title of Citation	Description of Applicability
40 CFR 64	Compliance Assurance Monitoring	Does not use air pollution control equipment to destroy pollutants.
40 CFR 61	NESHAPS	Source category not listed
40 CFR 63	MACTs	Not a major HAPS source
9 VAC 5 Chapter 80, Article 7 & 9 VAC 5 Chapter 60, Article 3	Major HAPS NSR Permitting	Not a major HAPS source
40 CFR 68	Prevention of Accidental Chemical Releases	Any chemicals on site are below threshold levels.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Emission Unit No.	Emission Unit Description	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
FP-1	Diesel engine for fire pump		300 HP/hr
LO 1-7	CT lube oil tanks	VOC	Each less than 1000 gal each
FPT-1	Fire pump diesel fuel tank	VOC	500 gal
Fugitive-1 (fuel oil)	Fugitives from unloading, processing and handling of distillate fuel oil	VOC	N/A
Fugitive-2 (fuel oil)	Fugitives from small distillate oil storage tanks	VOC	Each less than 500 gal
Fugitive -3 (Oil/water separator)	Fugitives from oil/water separator	VOC	Less than 500 gal

Insignificant emission units include the following:

The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

None identified.

PUBLIC PARTICIPATION

Draft permit placed on public notice in the Eastern Shore News Pilot from August 25, 2004, through September 24, 2004.

Public comments: None

Concurrent review: Draft and proposed permit to EPA on: August 25, 2004. Comments: None